

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/841,077	04/25/2001	Masashi Yamawaki	02416-00008	5889	
7590 05/30/2006			EXAMINER		
ARENT FOX KINTNER PLOTKIN & KAHN, PLLC			TORRES,	JUAN A	
Suite 600 1050 Connection	cut Avenue, N.W.		ART UNIT	PAPER NUMBER	
	OC 20036-5339		2611		

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		A		
		Application No.	Applicant(s)	
Office Action Summary		09/841,077	YAMAWAKI, MASASHI	
		Examiner	Art Unit	
		Juan A. Torres	2611	
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet	with the correspondence address	
WHIC - Exter after - If NO - Failui Any r	ORTENED STATUTORY PERIOD FOR REPLEMENTED IS LONGER, FROM THE MAILING Designs of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period ree to reply within the set or extended period for reply will, by statutively received by the Office later than three months after the mailing ad patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN 136(a). In no event, however, may will apply and will expire SIX (6) Mi e. cause the application to become	IICATION. a reply be timely filed ONTHS from the mailing date of this communication ABANDONED (35 U.S.C. & 133).	
Status				
1)	Responsive to communication(s) filed on <u>07 //</u>	March 2006.		
		s action is non-final.		
3)	Since this application is in condition for allowa	ince except for formal ma	itters, prosecution as to the merits	is
	closed in accordance with the practice under			
Dispositi	on of Claims			
4)🖂	Claim(s) <u>1-7,9-16,18 and 19</u> is/are pending in	the application.		
	4a) Of the above claim(s) is/are withdra			
	Claim(s) is/are allowed.			
6)⊠	Claim(s) <u>1-7,9-16,18 and 19</u> is/are rejected.			
7)	Claim(s) is/are objected to.			
8)[Claim(s) are subject to restriction and/o	or election requirement.		
Applicati	on Papers			
9) 🗆 -	The specification is objected to by the Examine	er		
	The drawing(s) filed on is/are: a) acc		by the Examiner	
	Applicant may not request that any objection to the			
	Replacement drawing sheet(s) including the correct	• • • • • • • • • • • • • • • • • • • •	` '	(d).
	The oath or declaration is objected to by the E			. ,
Priority u	nder 35 U.S.C. § 119			
-	Acknowledgment is made of a claim for foreigr ☐ All b)		§ 119(a)-(d) or (f).	
	1. Certified copies of the priority document			
	2. Certified copies of the priority document		· · · ———	
	3. Copies of the certified copies of the prior		n received in this National Stage	
* 0	application from the International Burea	, , , , , , , , , , , , , , , , , , , ,		
- 8	ee the attached detailed Office action for a list	of the certified copies no	t received.	
Attachment	ds)			
_	e of References Cited (PTO-892)	4) Interview	Summary (PTO-413)	
2) Notice	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No	o(s)/Mail Date	
3) Inform	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of	Informal Patent Application (PTO-152)	

DETAILED ACTION

Claim Objections

Claim 12 is objected to because of the following informalities: the recitation in line 2 of claim 12 "the predetermined mark for detecting synchronization are detected" (emphasis added) is improper, because it is not properly constructed; it is suggested to be changed to "the predetermined mark for detecting synchronization is detected" (emphasis added). Appropriate correction is required.

Claim Rejections - 35 USC § 112

In view of the amendment filed on 03/07/2006, the Examiner withdraws claim rejections under 35 USC 112 second paragraph to claims 2-7 and 17 of the previous Office action.

Response to Arguments

Regarding claims 1 and 10:

Applicant's arguments filed on 03/07/2006 have been fully considered but they are not persuasive.

The Applicant contends, "The Applicants submit that Wilson neither discloses nor suggests at least the combination of a plurality of detecting units being provided at each bit position of the parallel data, the detecting units being adapted to detect whether strings of bits continuing from each bit position as a starting point are the predetermined mark; and wherein any one of the detecting units detects the predetermined mark, as recited in claims 1 and 10, as amended".

The Examiner disagrees and asserts, that, Wilson discloses a receiving unit for receiving a series of data including a predetermined mark for detecting synchronization and generating a plurality of parallel data from the series of data (figure 5 block 510 column lines 7 lines 48-56); and a plurality of detecting units being provided at each bit position of the parallel data (figure 5 block 518 column 8 lines 47-54), the detecting units being adapted to detect whether strings of bits continuing from each bit position as a starting point are the predetermined mark (figure 5 block 528 column 8 lines 12-65); and where any one of the detecting units detects the predetermined mark (figure 5 block 518 column 8 lines 12-65). For these reasons and the reason stated en the previous Office action, the rejection of claims 1 and 10 are maintained.

Regarding claims 11:

Applicant's arguments filed on 03/07/2006 have been fully considered but they are not persuasive.

The Applicant contends, "Applicants submit that claim 11, as amended, is allowable over Wilson at least because Wilson does not disclose or suggest at least the combination of receiving a series of data including a predetermined mark for detecting synchronization', generating a parallel data from the series of data; detecting the predetermined mark for detecting synchronization from any one of strings of bits continuing from each bit position of the parallel data to establish synchronization of the series of data; and demodulating the series of data based on the predetermined mark for detecting synchronization detected from one of the bit strings".

The Examiner disagrees and asserts, that, Wilson discloses receiving a series of data including a predetermined mark for detecting synchronization (figure 5 input block 510 line 508 column lines 7 lines 48-52); generating a parallel data from the series of data (figure 5 output of block 520 input of blocks 515 and 516 column 7 lines 53-58); detecting the predetermined mark for detecting synchronization from any one of the streams of bits continuing from each bit position of the parallel data to establish synchronization of the series of data (figure 5 block 518 column 8 lines 47-65); and demodulating the series of data based on the predetermined mark for detecting synchronization detected from one of the bit streams (figure 5 blocks 538 and 556; column 8 lines 12-65; and column 11 lines 8-16). For these reasons and the reason stated en the previous Office action, the rejection of claim 11 is maintained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 9-16, and 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Wilson (US 6118603 A).

As per claims 1 and 10, Wilson discloses receiving a series of data including a predetermined mark for detecting synchronization (figure 5 input block 510 line 508

Art Unit: 2611

column lines 7 lines 48-52); generating a parallel data from the series of data (figure 5 output of block 520 input of blocks 515 and 516 column 7 lines 53-58); detecting the predetermined mark for detecting synchronization from any one of the streams of bits continuing from each bit position of the parallel data to establish synchronization of the series of data (figure 5 block 518 column 8 lines 47-65); and demodulating the series of data based on the predetermined mark for detecting synchronization detected from one of the bit streams (figure 5 blocks 538 and 556; column 8 lines 12-65; and column 11 lines 8-16).

As per claim 11, Wilson discloses receiving a series of data including a predetermined mark for detecting synchronization (figure 5 input block 510 line 508 column lines 7 lines 48-52); generating a parallel data from the series of data (figure 5 output of block 520 input of blocks 515 and 516 column 7 lines 53-58); detecting the predetermined mark for detecting synchronization from any one of the streams of bits continuing from each bit position of the parallel data to establish synchronization of the series of data (figure 5 block 518 column 8 lines 47-65); and demodulating the series of data based on the predetermined mark for detecting synchronization detected from one of the bit streams (figure 5 blocks 538 and 556; column 8 lines 12-65; and column 11 lines 8-16)

As per claims 2 and 12, Wilson discloses claims 1 and 11. Wilson also discloses detecting the predetermined mark for detecting synchronization in a predetermined bit width among the series of data in parallel condition (figure 5 blocks 515 and 516 column 7 lines 53-56; and column 8 lines 13-65).

As per claims 3 and 13, Wilson discloses claims 1 and 11. Wilson also discloses generation timing for selecting generation timing of the window for detecting the predetermined mark based on the predetermined mark for detecting synchronization (figure 5 block 506 column 7 lines 44-46).

As per claim 4, Wilson discloses claim 1. Wilson also discloses a data demodulating unit for demodulating the series of data between the predetermined mark for detecting synchronization based on the predetermined mark for detecting synchronization (figure 5 block 556 column 11 lines 8-16).

As per claims 5 and 14, Wilson discloses claims 1 and 11. Wilson also discloses a detection line memory for storing a detection line based on the predetermined mark for detecting synchronization (column 11 line 66 to column 12 line 8).

As per claims 6 and 15, Wilson discloses claims 1 and 11. Wilson also discloses selecting data based on the predetermined mark for detecting synchronization (figure 5 block 564 column 11 lines 54-65).

As per claims 7 and 16, Wilson discloses claims 1 and 11. Wilson also discloses counting the series of data between the predetermined mark for detecting synchronization based on the predetermined mark for detecting synchronization (figure 5 block 542 and figures 6 and 7 column 9 lines 15-23).

As per claim 9, Wilson discloses claim 1. Wilson also discloses a shift register to input the plurality of parallel bits connected with the detecting units in the same number as the number of parallel data (figure 5 block 510 column 7 lines 56-58; and column 8 lines 13-65).

Application/Control Number: 09/841,077

Art Unit: 2611

As per claims 18 and 19, Wilson discloses claims 1 and 10. Wilson also discloses that the plurality of detecting units are provided in equal number to the number of bits constituting the parallel data (figure 5 block 518; column 8 lines 47-54).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A. Torres whose telephone number is (571) 272-3119. The examiner can normally be reached on Monday-Friday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Juan Alberto Torres 05-25-2006